

What is claimed is:

1. A phytase that comprises an amino acid sequence which is at least 93.80% identical to the sequence of amino acids 1-467 of consensus phytase-10 (SEQ ID NO: 26).
2. A phytase that is encoded by a DNA sequence that is at least 95.88% identical to nucleotides 12-1412 of the DNA sequence of consensus phytase-10 (SEQ ID NO: 25).
3. A phytase that comprises an amino acid sequence chosen from
 - (i) SEQ ID NO: 26, or amino acids 1-438 thereof; or an amino acid sequence encoded by
 - (ii) nucleotides 12-1412, or 90-1412 of SEQ ID NO: 25.
4. A phytase that comprises an amino acid sequence chosen from
 - (i) consensus phytase-10-thermo[3],
 - (ii) variants of (i), further including the mutations Q50T, K91A, or (Q50T+K91A), the latter variant being shown in Fig. 8,
 - (iii) amino acids 27-467 of any of the sequences of (i) and (ii),
 - (iv) SEQ ID NO: 31, or amino acids 1-441 thereof; or an amino acid sequence encoded by
 - (v) nucleotides 1-1401, or 79-1401 of SEQ ID NO: 30.
5. A phytase that comprises an amino acid sequence chosen from
 - (i) consensus phytase-1-thermo[8],

- (ii) variants of (i), further including the mutations Q50T, K91A, or (Q50T+K91A), the latter variant being shown in Fig. 7,
- (iii) amino acids 27-467 of any of the sequences of (i) and (ii), or
- (iv) SEQ ID NO: 29, or amino acids 1-441 thereof; or an amino acid sequence encoded by
- (v) nucleotides 1-1407, or 79-1407 of SEQ ID NO: 28.
6. A phytase that comprises the amino acid sequence of consensus phytase-11 (SEQ ID NO: 27).
7. A DNA sequence that comprises a DNA-sequence encoding a phytase of claim 1.
8. A DNA sequence that comprises a DNA-sequence encoding a phytase, wherein the phytase-encoding DNA-sequence is (i) at least 95.88% identical, or (ii) hybridizes under high stringency conditions, to nucleotides 12-1412 of the DNA sequence of consensus phytase-10 (SEQ ID NO: 25).
9. A DNA sequence that comprises a DNA-sequence that encodes a phytase, wherein the phytase comprises an amino acid sequence that is at least 93.80% identical to the sequence of amino acids 1-467 of consensus phytase 10 (SEQ ID NO: 26).
10. A DNA sequence that comprises a DNA-sequence that encodes a phytase, and wherein the phytase-encoding DNA-sequence comprises
- (i) nucleotides 12-1412, or 90-1412 of the DNA sequence of consensus phytase-10 (SEQ ID NO: 25);

- (ii) nucleotides 1-1401, or 79-1401 of the DNA sequence of consensus phytase-10-thermo[3]-Q50T-K91A (SEQ ID NO: 30); or
- (iii) nucleotides 1-1401, or 79-1401 of the DNA sequence of consensus phytase-1-thermo[8]-Q50T-K91A (SEQ ID NO: 28).

11. A vector comprising a DNA sequence according to claim 7.
12. A microbial host cell comprising a DNA sequence according to claim 7, or the vector according to claim 11.
13. A process for producing a phytase, the process comprising culturing the host cell according to claim 12 under conditions permitting the production of the phytase, and recovering the phytase from the culture broth.
14. A food, feed or pharmaceutical composition comprising a phytase of claim 1.